

Self-Reflection and Insight and Its Relationship to Some Variable for University Students

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Abstract:

The current study focus to recognize the self-reflection and insight of the students of the University, and in order to verify this and after seeing many literature and previous Arab and foreign studies, a measure of self-reflection and insight was adopted for (Grant, 2002) which consists of (20) paragraphs and the researcher verified the standard characteristics of the scales of honesty and stability, and the tool was applied to a sample that reached (400) Students and students selected from four scientific colleges and four humanitarian colleges in the random manner for the academic year 2021-2022. The results of the study show the following:

1-Students of the university enjoy a high degree of self-reflection and insight. The results show that students of the university and of both scientific and humanitarian disciplines have a high degree of self-reflection and insight.

Keywords: self-reflection and insight, university students.

Introducing Research

First: The Problem of the Research:

Self-reflection is a conscious, structured survey and is one aspect of self-awareness that is an important beyond-knowledge process to stimulate adaptation and self-change. by understanding the position differently through examination, analysis and evaluation to monitor progress towards the required changes, Use feedback to promote progress towards improving performance and achieving goals self-reflection gives the individual confidence in his or her ability to exploit opportunities so as to make him or her responsible, But the tracker of the university students' practice of self-reflection finds that there is a general weakness by applying this type of meditation so that its positive effects on them during their university life.

The consequences of university students' self-reflection and insight are reflected in its impact on university students Meditative abilities are key to students' successful learning and maintaining high levels of quality educational outcomes. self-reflection also affects students' ability to think creatively and creatively, Its impact is also reflected in their approach to solving problems and issues that confront them. approach ", which is closely linked to problem-solving where it helps to accurately analyses the dimensions of the problems encountered in one's life in trying to find the right solution.

From the foregoing it can be said that self-reflection and insight are important variables in the educational process, especially among university students and, although critical in developing students' abilities, thinking and helping them to find appropriate solutions to problems, it has not received sufficient attention. Educational experiences and practices in areas of interest in self-reflection and insight in Iraq's self-reflection skills in the University's students", remains unsustainable, particularly for university students. to be able to meet the various challenges faced by society, and to play their part to the fullest. In addition to the above, the problem is to answer the following questions:

Are university students able to examine and evaluate their thoughts and feelings to find a solution to the problems they face? Do you find it difficult to teach self-reflection and British? That's what the current study is going to try to answer.

Second: The signification of the Research:

The importance of the current research lies in the novelty of its topic, as it has a clear impact on the student's university life and the importance of the undergraduate level dealt with in the subject.

The importance of self-reflection and insight is highlighted in the fact that it is a way to reach self-fulfilment self-reflecting person evaluates himself all the time to enhance his ability to overcome obstacles, It is also a way to reflect students' internal abilities, where they are more aware and aware of the changes that must be made during the performance of tasks. It also plays an important role in improving students' learning. and is influenced by the learner's processes, aspirations and future academic aspirations, Uncovering the link between the knowledge taught and the learner's ideas It is also a good way for students to learn about their experience, learning preferences and creative thinking about what they have learned. and (Klimova,2014,p:2), as well as making it easier for students to solve their problems and to know the different fundamental variables to build objective judgments on their issues and problems, and to facilitate their access to what they need in their lives and work.

The undergraduate stage is an important stage for qualifying young people for responsibility and real knowledge in line with the labor market and the requirements of today's era. It is also a stage for them to think about solving the problems of society and moving the production process forward. Therefore, many countries have taken care of this stage and have given it much attention to study in order to reach an influential figure who can think sound scientific (Al-Tikriti, 1990:115).

Third: Aims of Research

Current Research Identification aims to:

1-Self-reflection and insight among university students depending on the gender variable and specialization of university students.

fourth: Limitation of Research:

The current research on Baghdad University students of both sexes (male/female), in the morning study is determined in its scientific and humanitarian faculties for the academic year 2021/2022.

Fifth: Identification of Terms:**Self-reflection and insight Reflection and Insight Self- known by both:**

- (Grant, 2002):

The individual's self-awareness is an examination and evaluation of his personal thoughts and feelings and reflects the main above-cognitive factors of the process of meaningful and targeted change (Grant, 2002:821).

☐ (Jasper and others,2013):

Active reflection on our experiences to understand and learn from (Jasper and others, 2013, 46).

Theoretical definition:

The definition (Grant, 2002) was adopted to adopt its measure in current research.

Procedurally: The overall scores that the respondent receives from its responses on the subparagraphs of the self-meditation scale and insight.

Theoretical background:**Self- Reflection and Insight**

Many universities have tended to use self-reflection as an entry point for the preparation of university students. Meditation is a cognitive insight that leads to loading Dewey's procedures, decisions and outputs.(Dewey, 1961:18). Meditation is divided into centralized meditation, meditation and insight. Centralized meditation is interpreted on the basis of looking at and focusing on one point and neglecting other points. In meditation and insight, the learner tries to realize all points as much as he or she can and thus becomes more sensitive to diverse triggers and improves his or her perception at a higher rate.

The importance of self-reflection and insight:

There is no doubt that meditation is of great importance in the life of the individual. God Almighty stated in the heavenly books that man is created to reflect and reflect, so that he can create and make the right decisions. Therefore, the learner's self-reflection is essential and important in order to be able to develop himself and evaluate his performance Its importance is as follows:

- 1_ Self-reflection develops a sense of self-satisfaction, greater motivation and self-confidence, and this results from a learner's loss of work and goals.
- 2_ The learner develops research, survey and self-learning skills in order to reach the best.
- 3_ Learners develop the ability to guide themselves towards their goals and work behind their achievement.

4_ Self-reflection achieves a great level of self-awareness about the nature and impact of performance, creating opportunities for growth and cognitive development.

5_ Raise the quality of learning opportunities that a teacher can offer his or her learners.

6- Self-reflection is the conscious survey of everyday life practices, careful reflection on one's beliefs, values and experiences to learn about contemporary issues, and reflection on the problems faced by one's own goals, with the aim of achieving a solution that moves this practice from undesirable to better and more sophisticated future practice in order to improve self-development and achieve the desired goals.

7- Students become aware of their strengths and weaknesses.

8-Expands their cognitive skills.

9-Their skills increase beyond cognitive and especially critical thinking skills.

10_Develops their writing skills.

11- Students become aware of their own learning methods.

12- Helps students develop their personality.

13- Encourages self-motivation and self-learning.

14- It makes students more responsible for their learning (Kilmova, 2014:62).

(Hinett&Varvava) adds that self-reflection helps learners:

- 1- Understand what they already know (the individual).
- 2- Identify what they need to know in order to enhance understanding of this topic (environment).
- 3- The meaning of new information and feedback in the context of their own experience (relationship).
- 4- Guide Options for Further Learning (Learning or Development) (Hinett&Varvava, 2002, 3).

Types of self-reflection:

For self-reflection three types are:

a. "Individual meditation": In order to detect strengths and weaknesses using a self-reflection card, this type is characterized by the fact that an individual is more convinced of his or her findings, also protects the learner from being embarrassed before others, helps him or her to build his or her new learning, and is more aware and understanding of him or her, and his or her learning is meaningful, which is used in current research.

b. Mutual meditation: In which each learner considers his/her colleague's work, prolongs his/her consideration to discover his/her strengths and weaknesses, using a card that identifies aspects of meditation that are desirable, useful because some learners do not have the ability to detect their own mistakes, and earns them a lot of important aspects such as accepting criticism, cooperation and respect for the other...

c. 'Participatory Collective Meditation': Where each learner's work is presented to their colleagues, the teacher determines what to focus on using meditation cards, through a set of questions that elicit their thoughts on work and here meditation is more productive and more useful for them (arfan, 2014: 134-135).

Levels of self-reflection

Self-reflection in four levels is as follows:

- a. Descriptive writing: The individual describes what he did during his work.
- b. Interpretive meditation: meditate on the work and try to justify it by putting forward a single solution.
- c. Interactive meditation: An internal dialogue by an individual to test the solutions and hypotheses that he has developed to solve the problems he faces.
- d. Women's Critical Meditation: Collective Meditation Based on Collective Participation, Not a Condition for Change But Its Focus (Ministry of Education, 2019:9).

Self-reflection models

For self-reflection, several models include:

Model (Gibbs, 1988) for meditation:

In Gibbs' view, meditation per se is not enough. He must test his findings and put his findings back into practice. He must therefore develop a plan of action that will enable him to determine what could change in the future. His model includes six phases:

- A- Description: What is the catalyst for meditation? Describe the situation and present the theoretical idea.
- B- Feeling: reactions and feelings related.
- C- Calendar: judgement.
- D- Analysis: Extraterritorial ideas.
- E- Summary: Extracted from experience.
- F- Plan of Action : The extent to which the workflow will change if you go through the same experience again (Gibbs, 1988, p5).

G- Model (Kolb, 1984) for meditation:

This model operates at two levels: a four-stage circle, and four separate learning systems, much of which relates to the learner's internal cognitive processes. The model also indicates that learning is associated with the acquisition of abstract concepts that accept application in a range of situations. New experiences are motivated to learn new concepts:

- a. Scientific expertise in which experience is gained.
- b. Meditative observation: The experience is meditated upon.
- v. Abstract concepts: in which experience is learned.
- C. Effective experimentation: experience what you learn www.simplypsychology.org

H-Model (Johns, 1995) for meditation:

The form includes five queries to benefit from meditation and its outputs:

- a. Description: Includes key aspects of the situation description.
- b. Meditation: The goal pursued by the meditator.
- C. Factors influencing performance and decision-making.
- D. Alternative strategies: How to handle the situation better.
- E. Learning: Making use of that future experience (Johns, 1995, p2).

Dimensions of self-reflection and insight:

The literature refers to a number of dimensions included in the concept of self-reflection and insight, the same dimensions as the scale adopted in the current research to measure meditation and insight. These dimensions are:

1- (Need for Reflection): reflects this dimension to the learner's ability to ascertain his thoughts by retrieving information or predicting information that is expected to be circulated in the light of his previous experiences.

2- (Engage in reflection): This dimension reflects the important role in identifying points of interdependence, combining previous and new information and building a clear meaning between them that may be the conclusion of previous laws, linking new laws, or resolving the cognitive discrepancy between new experiences and the learner's own past experiences.

3- (Insight): This dimension reflects the highest levels of self-contemplative abilities. It is the ability to distance information and expertise relevant to unrelated information and expertise, meaning the learner's ability to link seemingly scattered information and ideas to form and formulate ideas that do not represent those parts.

These dimensions demonstrate that the ability to meditate and insight helps the learner to thoroughly examine the dimensions of the problems that Leah is exposed to in his daily handling of various life situations. Practising different levels of thinking in an attempt to reach a suitable solution (Ahmed, 2018:152).

Self-reflection and insight tools:

For self-reflection, a number of tools depend on the accuracy of the data and information contained therein, including:

1- Self-evaluation: The process by which a learner can self-evaluate against certain criteria by which he or she can judge his or her potential, abilities and performance for future development, including:

a. Checklists: These are lists with expressions of what a teacher should do in different teaching situations and processes.

b. Self-reflection reports: reports prepared by learners after the completion of teaching processes to identify strengths and weaknesses.

2- Verb research (procedural): individual or collective meditative research processes aimed at the scientific study of specific problems facing those who research to work to solve those problems.

3- Access to research results: One of the most important means of obtaining self-reflection data.

5- **Note:** A direct tool that can be used to collect accurate data on what is happening.

- 6- **Interviews:** One method that is difficult to obtain through written or observational answers, depends on the relationship between who is researched and who is interviewed, and how well prepared it is.
- 7- **Peer Evaluation:** The learner invites one or more colleagues to assess their practices, provide feedback and share proposals to improve teaching skills (Sumily, 2019:245).

Self-reflection and insight steps

In order to carry out self-reflection, an individual must collect information in an orderly manner, then arrange, analyses and compare what he has collected with the assumptions he made earlier. To this end, the individual must have real evidence to support his collection. The steps of self-reflection are as follows:

- Collect information: by taking notes, observing students, observing colleagues, recording lessons.
- Identify aspects of education that need improvement and think about problem solving for decision-making.
- Planning implementation after decision-making whether in teaching method or dealing with students.
- Final implementation: in an automatic manner.
- Impact analysis: a study of implementation and data again (Islam,2015: 84).

Self-reflection and insight requirements

Self-reflection and insight require many things, including:

1. **Thinking skills:** Reflection is a mental work that requires thinking skills, such as analysis, evaluation, criticism, balancing, linking, etc., and adopts appropriate thinking strategies that employ thinking skills to achieve scientific, objective and accurate reflection. Six-cap theory provides a psychological basis for meditation. White hat skills are the most used in self-reflection.
2. **Tools that encourage self-reflection:** Self-reflection needs an exciting presence that stimulates and guides thought in the desired direction, so self-reflection tools are interested in achieving this. This requires that they be built in a scientifically correct and accurate manner, encompassing all targeted aspects, with continuity, sequencing and complementarity, in order to achieve their intended objective.
3. **Appropriate teaching and learning attitudes:** Educational and learning attitudes transform the elements of education and learning from the presence of force to the existence of reality. Such attitudes must be comprehensive and implemented in a scientific manner. In designing educational attitudes, meditation attitudes, tools and procedures should be taken into account in an integrated and interactive manner with the elements of educational attitudes.
4. **Timing:** Mental work should allow time for stages of reflection, from understanding, thinking and interacting with a situation, as well as choosing the right time to do meditation. This needs good experience and planning. It is achieved through the use of

appropriate teaching strategies, which take into account their own meditation actions, such as thinking strategies, and beyond thinking.

5. **Motivation:** Motivation and reflection share in each other's self-action influenced by external factors And the impulse of energy drives the organism more effort towards learning, And meditation is a mental energy that drives the learner to learn more; each needs each other, Motivation without meditation may be wasteful efforts, hope without motivation is insensitive thinking, Because it doesn't do the necessary effort, it comes superficial and ineffective.

6. **Structured mechanism:** In order to achieve its objective, meditation should take place within an integrated system. Systemic work saves time and effort and avoids mistakes. When meditation is done according to a system, it achieves what is intended in the shortest way (Irfan, 2014:133).

Axis II: Anterior Studies

Study (Winston, 2010) entitled: "The impact of self-reflection and attention on problem-solving"

The study aimed to recognize the impact of self-reflection and attention on problem-solving style. The descriptive curriculum was used, and the tools were applied to two groups of depressed patients and to two groups of people who were equal, and then the researcher compared them to self-meditation and attention. The study found the following findings: no relationship between attention and problem-solving, and a statistically significant relationship between self-reflection and problem-solving **(Winston,2010: 3).**

The study "Ahmed" (2018) is entitled: "Emotional innovation and its relationship to constructive thinking, reflection and insight among university students."

The study aimed to learn about emotional innovation, constructive thinking, reflection and insight among university students. The descriptive curriculum was used, the Averill Scale of Emotional Innovation was used, the Epstein & Meier Scale of constructive thinking, and the tools were applied to a sample of 400 students and students. The study found the following results: University students have the ability to apply their feelings in society effectively and positively to meet their needs and that of society in an authentic manner, as well as a good degree of constructive thinking, reflection and insight. The results did not show a statistically significant relationship between emotional innovation, constructive thinking, meditation and insight **(Ahmed, 2018:139).**

Ibrahim Study (2021)

Effectiveness of a proposed training program for social studies educators based on the integration of the SWOT quadrilateral analysis tool and the PDCA performance improvement model to develop professional knowledge management skills and professional self-reflection

The study aimed to develop professional knowledge management skills and professional self-reflection of social studies teachers by service, for which a proposed

training program based on the integration of the quadruple SWOT analysis tool and the PDCA performance improvement model was built, the pilot curriculum was used, and the sample study was formed from 30 A social studies teacher, a note card was used for professional knowledge management skills, and a measure of professional self-reflection. The study found the following results: The existence of a difference of D statistically between the average grades of the pilot group teachers in the tribal and postgraduate applications of both the observation card and the vocational self-meditation measure in favour of remote application, a positive correlation between professional knowledge management skills and professional self-meditation ability (Ibrahim, 2021:909).

Research methodology and procedures:

Firstly, Approach of the Research based the current study on the descriptive curriculum, which is suited to the nature of the study. "This approach is defined as: the approach that studies the variables in their natural condition in order to determine the level of relationships that may exist between these variables (Wiersma, 2004, p15).

It is based on a description of the research topic and its causes and analysis, not only on the description but also on analysis and interpretation based on the use of statistical methods, data processing and hence the submission of proposals.

Second: The research community: Population of the Research is defined as "all individuals covered by the research problem topic whose results will be disseminated to them" (Odeh, 1998:85). Through the current research problem and its objectives, the society to which the scale will be applied consists of the University's many students in Baghdad. (53,928) Students and students, the number of students in scientific colleges has reached (32984) The proportion (61%), (14642) students (18342) students, while the number of students in humanitarian colleges has reached (20944) which constitutes 39% of the research community with 7,405 students and 13,539 students.

Third: Research Sample is part of the original community, if selected in a form that represents the original community comprehensively, and the sample is selected because of the difficulty of conducting research on all members of the community due to scientific and physical applied difficulties (Abd al-Rahman, 1998:39) For a sample representing the community, the researcher adopted the proportional method, where the sample was selected in a random manner from the class commensurate with its true size in the basic society, and the sample of the research consisted of (400) students from the original research community, divided into (8) colleges of four scientific colleges and four humanitarian colleges, selected in a random manner from students of the University of Baghdad for the academic year (2021-2022), as the number of students in the scientific specialization reached (244) 107 males and 137 females, while the students of the humanitarian profession reached (156) by (55) males and (101) females. Table (1) shows this:

Table (1)
Sample research by gender , colleges and specialization

T	College	Male	Female	Total
1	Algorithm Engineering	49	47	96
2	Science	58	90	148
3	Literature	29	55	84
Total		26	46	72
		162	238	400

Fourth: Research Tools: To connect to research objectives, a scale commensurate with the theoretical background and current research society must be provided, with good psychometric characteristics, so self-meditation scale and insight are prepared and steps will be presented through the following:

First: Measure of self-reflection and insight: For the purpose of measuring the relationship of self-reflection and insight of university students and after seeing many literature and previous studies foreign and Arab, including the scale (Grant, 2002), study (Ababa and Canche, 2020), study (warfare and alBorini, 2020) a measure of self-reflection and insight for (Grant, 2002) as well as adopting its definition

For self-reflection and insight being the only definition that fits with the current research.

Logical analysis of self-meditation scale paragraphs and insight:

For the purpose of ascertaining the apparent truthfulness of the scale paragraphs (20), a paragraph was displayed on (10) Experts specializing in educational and psychological sciences, to ascertain the appropriate wording of the paragraphs and their alternatives ostensibly, and to analyses their opinions, a test was used (c2) For one sample the paragraph is valid when the calculated chi-square value is at the level (0.05) It is equivalent to 78% of the number of experts. All paragraphs were approved by the experts. Therefore, the paragraphs of the scale became reasonably valid to measure what they were designed to measure.

Exploratory application and experience the clarity of instructions for scale paragraphs:

For the purpose of defining the clarity of the scale's instructions, the clarity of its paragraphs and alternatives, and the difficulties encountered by the respondent to avoid them, The time taken to answer the scale was applied to a sample of 30 students from scientific and humanitarian colleges. Randomly selected from the Faculty of Languages and the Faculty of Engineering. After the application was carried out and the responses reviewed, it became apparent that the paragraphs and instructions of the scale were clear to students and that the time taken to answer the paragraphs of the scale ranged from 10 to 15 minutes.

Correction Scale:

It is intended to establish a degree of responsiveness of the sample personnel to each paragraph of the scale, thereby establishing the overall degree of the measure of self-reflection and insight in its paragraphs (20) for each student. For this purpose, five alternatives and different degrees have been identified for each paragraph as follows: (Apply perfectly, apply, to some extent, do not apply, do not apply at all). The researcher gave the grades (5, 4, 3, 2, 1), by which formula the overall degree of each student will be calculated by combining the grades on the paragraphs of the scale, and theoretically the highest degree the student can receive is (100) and the lowest score is (20).

Statistical analysis of self-meditation scale paragraphs and insight:

Selecting paragraphs with appropriate psychometric properties, apply the scale to a constituent sample

From 400 students and students, the researcher conducted statistical analysis from the calculation of discriminatory force and validated the paragraphs of the measure of self-reflection and insight as follows:

1- (Discrimination Power of Items):

After the scale was applied to the sample's number of individuals (400) Students and students and correction of answer forms. To extract the discriminatory force of the scale paragraphs, the grades of members of the sample were arranged from the highest total to the lowest total and the two extremist groups were identified at the college level. (27%) of each group, and the number of individuals in each group 108 students in the higher group, 108 students in the lower group. (t-test) for two separate samples in calculating the difference between the two groups' averages in the grades of each paragraph of the scale, and all paragraphs were found to be discriminatory because they were statistically significant, as the calculated T value was greater than the tabular T value of 1,96 to a degree of freedom (214) at an indicative level (0.05). Table (2) shows the results resulting from the calculation of the discriminatory strength of the paragraphs for each of the current scale axes.

Table (2)
Values of discrimination transactions for self-reflection and insight axis paragraphs

T section	Higher Group		Minimum Group		Calculated T-value
	Arithmetic Average	Standard deviation	Arithmetic Average	Standard deviation	
1	3,95	1,017	3,42	1,051	3,741
2	3,77	1,035	3,34	0,958	3,206
3	4,00	0,901	3,31	1,116	5,030
4	3,77	1,061	3,26	1,010	3,611
5	3,90	1,037	3,21	1,005	4,997
6	3,92	0,934	3,15	1,095	5,548
7	3,80	1,106	3,08	1,120	4,687
8	3,98	1,004	3,30	1,155	4,587
9	3,79	0,964	3,37	1,038	3,55
10	3,93	1,016	3,26	0,953	4,972
11	4,09	0,932	3,30	1,256	5,227
12	3,82	1,021	3,34	0,938	3,606
13	3,72	1,048	291	1,161	5,351
14	3,84	0,958	3,25	1,155	4,039
15	3,93	0,845	3,36	1,106	4,2285
16	3,91	0,928	3,39	1,110	3,723
17	4,12	0,809	3,32	1,083	6,188
18	3,94	0,965	3,40	1,102	3,809
19	4,11	0,812	3,41	1,120	5,25
20	4,21	0,797	3,31	1,157	6,641

Table (2) Tabular T value = (1.96) at an indicative level (0.05) and a degree of freedom (214).

2- Item Value (Internal Continuity)

This method is one of the most accurate means of calculating the truthfulness of paragraphs in measuring the concept. It provides a uniform measure so that each paragraph measures the behavioral dimension measured by the whole scale and highlights the interrelationship between the paragraphs of the scale (Abdel Monim, 1993:171).

It approaches the concept of homogeneity between paragraphs in the measurement of characteristic

(Nunnally, 1978:292) (Abu Hatab, 1977:206), the veracity of the paragraphs was calculated by:

1-The degree of the paragraph relates to the overall degree of the axis to which it belongs:

In order to find out the paragraph's relationship with the axis to which it belongs, the self-reflection and insight scale was applied to a sample of 400 students. Then Pearson's correlation coefficient was used to calculate this relationship. The results showed that all correlation factors were statistically significant at an indicative level (0.05). The values of their correlation coefficients to the overall degree of each axis were greater than the critical value of 0.098 to the degree of freedom (398) and the level of indication (0.05). Table 3 shows this.

Table 3
Correlation factor between the degree of each paragraph and the overall degree of the axis to which it belongs

section Number	Pearson Binding Coefficient	section Number	Pearson Binding Coefficient	section Number	Pearson Binding Coefficient	section Number	Pearson Binding Coefficient
1	0,220	6	0,273	11	0,236	16	0,222
2	0,170	7	0,277	12	0,214	17	0,322
3	0,254	8	0,274	13	0,281	18	0,238
4	0,234	9	0,201	14	0,229	19	0,249
5	0,250	10	0,261	15	0,204	20	0,340

Psychrometric Features of the Scale

First: validity :

It is a fundamental characteristic in the preparation of educational and psychological standards to be observed. The sincerity of self-reflection and insight measure has been verified by the type of honesty:

1-Face Validity:

It indicates the scale's suitability for the property to be measured (Achenbach, 1978:78) and the aim of virtual honesty is to know how well the tool can measure a specific subject of behavior (Return and Al Khalili, 1988:157), and the apparent veracity of the self-meditation and insight scale was verified, presenting the measure to the panel of arbitrators in order to render their judgment on the extent to which the paragraphs of the measure represent the measured concept.

2-Construct Validity:

It means the sum of psychological traits that appear in the markers of a scale, and construction is a psychological property that we cannot directly observe, and where we can know them through a set of associated behaviors (Melhem, 2002:269), and this veracity has been verified, by finding the discriminatory power of the paragraphs as

well as finding a verification factor by calculating the degree coefficient of each paragraph to the overall degree of the scale. Based on these results, the measure of self-reflection and insight is enjoyed sincerely build .

Second: Reliability: Stability is calculated in the Alpha Cronbach way as follows:

▪ **Cronbach's Alpha equation:**

The consistency of individuals' responses to the test paragraphs is based on a reliable assessment of the ratio of the constant factor (Alam, 2014:101). For the purpose of extracting the constant according to this method, the researcher selected (100) students and demanded the random manner of the statistical analysis sample, which was 400 students and demanded the use of the Cronbach's Alpha formula, which was a good constant factor (0.81).

Presentation and interpretation of results:

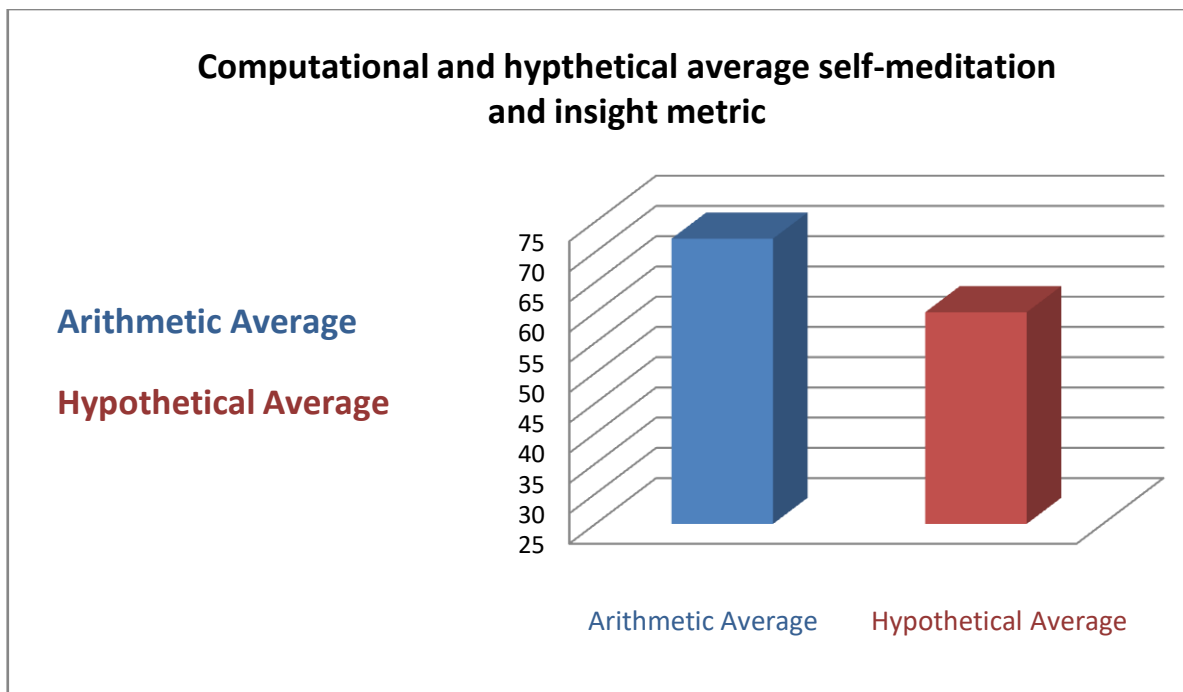
First objective: To learn about the self-reflection and insight of university students according to gender and specialization variables.

To achieve the goal, the self-reflection and insight scale consisting of (20) paragraphs was applied to the research sample consisting of (400) students.

Results showed that the average calculation of the sample scores on the scale has reached (72.170) with a standard deviation of (5.273) and to determine the difference between the computational average and the hypothetical average (60) degree, one sample T test was used and the difference D was found to be statistically at an indicative level (0.05) as the calculated T value was (46.163) greater than the tabular T value (1.96) and freely (399) This means that the university students have a degree of self-reflection and high insight and table (4) shows this:

Table(4)
Arithmetic average, standard deviation and T value of self-meditation measure and insight

Variable	Number	Arithmetic Average	Standard deviation	Hypothetical Average	T-value		Indicative level (0.05)
					Calculated	Scheduling	
Self-reflection and insight	400	72.170	5.273	60	46.163	1.96	function



(1) Computational and hypothetical average self-meditation and insight metric

The two researchers then carried out another procedure, namely, to identify self-meditation according to the sex and specialization variables, as follows:

According to gender (male-female)

Male and female responses were taken on the individual self-meditation scale, and for the purpose of identifying differences between computational averages and hypothetical averages, the one sample T test was used. The difference was found to be statistically D at an indicative level (0.05), as their calculated T values were greater than the tabular T value of 1,96, and to the degree of freedom. (161, 237) This means that male and female university students possess self-reflection, high insight and table (5) and figure (2) shows this

Table (5)
Arithmetic average, standard deviation and T value of self-reflection depending on gender

gender	Number	Arithmetic Average	Standard deviation	Hypothetical Average	T-value		Indicative level (0.05)
					Calculated	Scheduling	
Male	162	72,204	5,334	60	29,122	1,96	function
female	238	72,147	5,242	60	35,750	1,96	function

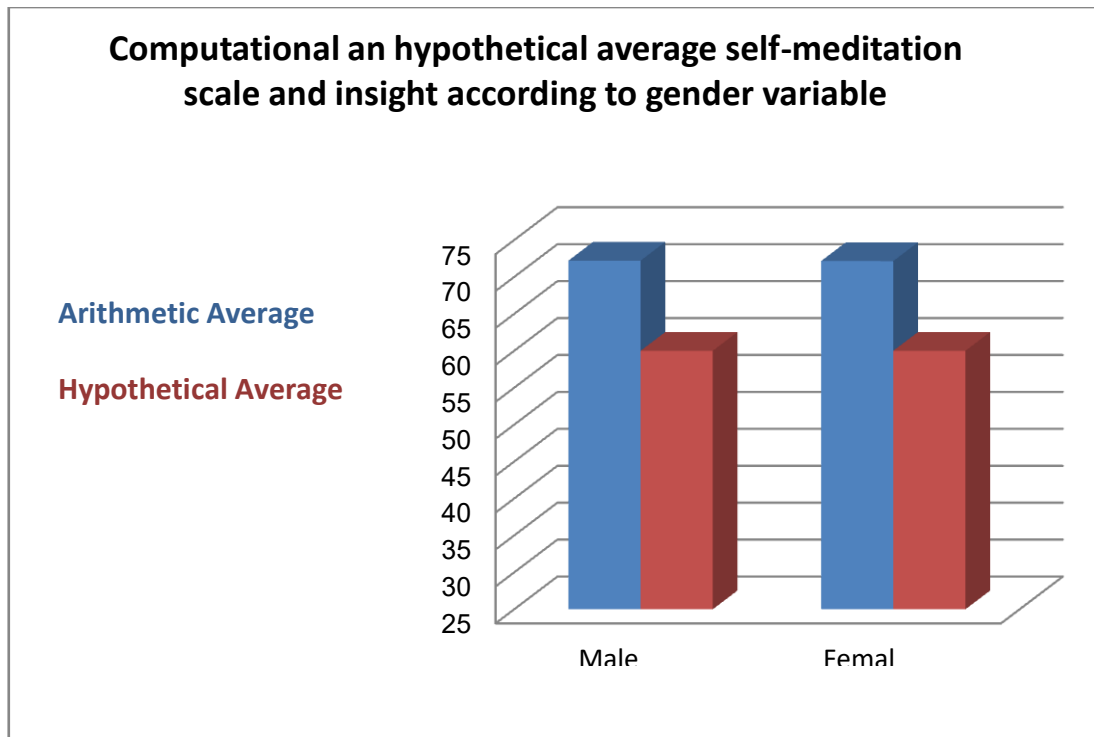


Figure (2) Computational and hypothetical average self-meditation scale and insight according to gender variable

b. According to specialty (scientific – humanitarian)

The responses of specialized students (scientific and human) were taken on the individual self-meditation scale. For the purpose of identifying the differences between the computational averages and the hypothetical average, the one sample T test was used. The difference was found to be statistically D at an indicative level (0.05) for students of scientific and humanitarian specialization, as the calculated T values were greater than the tabular T value of 1,96. (243, 155), which means that the university students are specialized (Scientific and human) possess self-reflection and high insight and table (6) and figure (3) shows this.

Table (6)

special ization	num ber	Arithmeti c Average	Standard deviation	Hypothetical Average	T value		Indicativ e level (0.05)
					Calculated	Scheduling	
Scientif ic	244	72,475	5,032	60	38,727	1,96	function
Human	156	71,692	5,612	60	26,023	1,96	function

Arithmetic average, standard deviation and T value of self-reflection depending on specialization

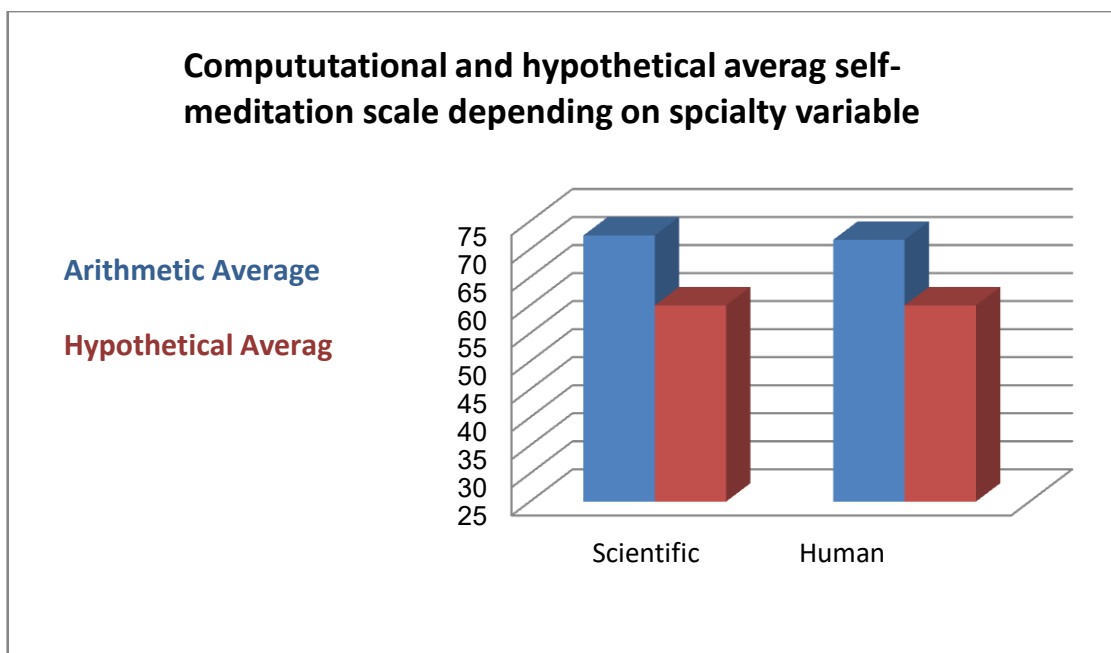


Figure (3) Computational and hypothetical average self-meditation scale depending on specialty variable

Conclusions:

- 1-University students have a tendency to examine and evaluate their thoughts when deciding in a problem-solving situation as a result of their good degree of awareness of their selves and above-cognitive factors.
- 2- University students have the ability to retrieve information or predict information expected to be learned by them in the light of their past experience.

Recommendations:

1. Higher education institutions have to play an active role in instilling the principles of self-reflection, insight, and creative thinking skills.
2. Raise the level of academic ambition among university students to meet the challenges facing them in the working environment by providing the necessary facilities and rewards commensurate with high levels of ambition.

Proposals:

1. Conducting training programs to give university students the skills of self-reflection and insight.
2. Conduct a study to examine the relationship between self-reflection, insight and mental abilities or intelligence.
3. Conduct a similar study on other samples such as preparatory, or primary, students.

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